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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,327

06/30/2005

Haruhiko Shimizu

108421-00122

1226

4372 7590 12/27/2006  
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EXAMINER

NGUYEN, HANH N

ART UNIT

PAPER NUMBER

2834

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/27/2006

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/541,327

**Applicant(s)**

SHIMIZU ET AL.

**Examiner**

Nguyen N. Hanh

**Art Unit**

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiaki (JP 55-086361) in view of Takahashi et al.

Regarding claim 1, Chiaki discloses a rotor for a permanent magnet type motor, comprising: a rotor yoke (6 in Fig. 3); a permanent magnet (4) connected on a surface of the rotor yoke; and a metal film (5, 7) which is disposed between the rotor yoke and the permanent magnet, wherein the rotor yoke and the permanent magnet are subjected to welding (Abstract) only at a microscopic connection interface area located between the permanent magnet and the rotor yoke (Figs. 3, 4 and 5 clearly show the weld nuts are located only at a microscopic connection interface area with reference signs 5 and 7) . Chiaki fails to show the method of welding is beam welding.

However, Takahashi et al. disclose a motor structure wherein the ends of the conductors are welded by means of TIG welding, brazing, resistance welding, electron beam welding, laser welding or soldering for the purpose of providing an improved method of manufacturing (Col. 1, lines 65-66).

Since Chiaki and Takahashi et al. are in the same field of endeavor, the purpose disclosed by Takahashi would have been recognized in the pertinent art of Chiaki.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Chiaki by using beam welding method as taught by Takahashi et al. for the purpose of providing an improved method of manufacturing.

Moreover, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation (beam welding) has not been given patentable weight.

Regarding claim 2, Chiaki also discloses a rotor for a permanent magnet type motor wherein the metal film (5) is formed on a surface of the permanent magnet (4).

Regarding claim 3, Chiaki discloses the claimed invention except for showing a rotor for a permanent magnet type motor wherein the metal film has a thickness of 25 to 90  $\mu\text{m}$ . It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a metal film with a thickness of 25 to 90  $\mu\text{m}$ , since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Regarding claim 4, Chiaki also discloses a rotor for a permanent magnet type motor wherein the metal film (5) contains at least of one of nickel and Copper (Abstract).

2. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiaki (JP 55-086361) in view of Takahashi et al. and further in view of Emoto.

Regarding claim 5, Chiaki and Takahashi et al. disclose the invention except for showing the rotor for a permanent magnet type motor wherein the metal film has a nickel film composed of nickel.

However, Emoto discloses a motor structure wherein the metal film has a nickel film composed of nickel (Col. 5, lines 15-20) for the purpose of preventing adversely effect of a magnetic circuit.

Since Chiaki, Takahashi et al. and Emoto are in the same field of endeavor, the purpose disclosed by Emoto would have been recognized in the pertinent art of Chiaki and Takahashi et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Chiaki and Takahashi et al. by using the metal film has a nickel film composed of nickel as taught by Emoto for the purpose of preventing adversely effect of a magnetic circuit.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiaki (JP 55-086361) in view of Takahashi et al. and further in view of Torok.

Regarding claim 5, Chiaki and Takahashi et al. disclose the invention except for showing the rotor for a permanent magnet type motor wherein the rotor yoke has a stacked structure.

However, Torok discloses a motor structure wherein the rotor yoke has a stacked structure (Fig. 2) for the purpose of improving motor efficiency.

Since Chiaki, Takahashi et al. and Torok are in the same field of endeavor, the purpose disclosed by Torok would have been recognized in the pertinent art of Chiaki and Takahashi et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Chiaki and Takahashi et al. by using the rotor yoke has a stacked structure as taught by Torok for the purpose of improving motor efficiency.

#### ***Response to Arguments***

4. Applicant's arguments filed 10/20/06 have been fully considered but they are not persuasive. The applicant's argument is on the ground that "the reference the Examiner relies on, Chiaki, discloses a connection between the rotor and a permanent magnets by soldering which is unsuitable connection technique for motors, not by welding; it is not obvious to Takahashi to Chiaki because Takahashi discloses welding of a stator not disclose connecting a rotor and a magnet". The Examiner respectfully disagrees with the Applicant. Webster's dictionary defines "weld" as "to unite (metallic part) by heating and allowing the metals to flow together or by hammering or compressing with or without previous heating". Therefore, the structure disclosed by Chiaki also have the permanent magnet and the rotor yoke welded at a microscopic connection interface area between the two parts (with the weld nuts located only at a microscopic connection interface area). Even though Takahashi et al. disclose the beam welding in the stator, it is obvious to use the teaching of Takahashi et al. in the Chiaki structure because the Examiner does not try to incorporate to different structure to a new machine. The test

for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In the instant case, it would be obvious for an ordinary skill in the art to use beam welding method instead of soldering with pressure. The Examiner acknowledges that in the present invention, the heat for welding is applied only at the interface of the two part to prevent the magnetic property of the permanent magnet from deteriorating.

However, that limitation was not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

For the reasons explained above, the rejection is still deemed proper.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Information on How to Contact USPTO***

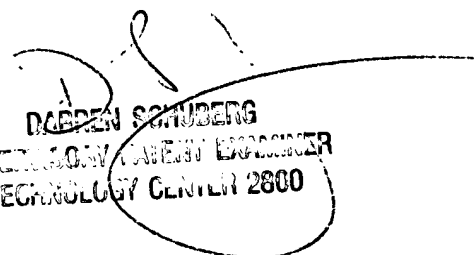
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (571) 272-2031. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg, can be reached on (571) 272-2044. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN

December 14, 2006

  
DARREN SCHUBERG  
SUPERVISOR/AGENT EXAMINER  
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